

Qubit - DNA concentration quantification (Invitrogen)

Materials:

* n refers to no. samples

- Assay tubes (n+2)
- Qubit dsDNA BR reagent ($1 \times (n+2)$ μ l)
- Qubit buffer ($199 \times (n+2)$ μ l)
- Standard 1 (10 μ l)
- Standard 2 (10 μ l)
- 1-10 μ l sample DNA
- Assay tubes (0.5 ml tubes)

Protocol:

1. On ice, prepare the Qubit working solution by preparing a 1 in 200 dilution of qubit reagent in a 10 ml Falcon tube protected from light (e.g. wrapped in foil). Determine the volumes to use by using the equations in materials.
2. Prepare the standards in separate assay tubes by making up 10 μ l of standard 1 and 2 to 200 μ l using Qubit working solution.
3. Make up 1-10 μ l of sample DNA to 200 μ l in the same way.
4. Vortex tubes for 2-3 seconds and incubate at room temperature or 2 minutes.
5. Set up the Qubit 2.0 Fluorometer to read dsDNA BR.
6. Read standards 1 and 2.
7. Insert the first sample and read. Select the 'Calculate stock concentration' option and select the volume of sample used in assay.